

Remarks

Status

Claims 42-46, 48-60 and 62-73 were pending in the application and all the pending claims were rejected for the various reasons described in the Office Action and summarized below. Claims 42, 46, 60 and 71-73 have been amended. Claim 43 was canceled. Claims 42, 46, 52, 60, 66, 71 and 73 are the independent claims.

Discussion

The Examiner rejected claims 46, 52 and 60 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of USP 6,457,010. The Applicant submits a terminal disclaimer with this amendment to overcome this rejection. The rejection should accordingly be withdrawn.

The Examiner provisionally rejected claim 60 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 78 of co-pending patent application 09/204,888. The Applicant submits a terminal disclaimer with this amendment to overcome this rejection. The rejection should accordingly be withdrawn.

The Examiner rejected claims 42, 46 and 60 under 35 USC 112, second paragraph, as being indefinite because the Examiner considers the claim language “not directly related to the subscriber interactions” to not be well understood. Applicant believes that the claim language was definite, but in order to expedite prosecution of the application has amended the claims to remove this element. Applicant respectfully submits that the rejection is not applicable to the amended claims. Accordingly the rejection should be withdrawn.

The Examiner rejected claims 42-46, 48-60 and 62-73 (Office Action included claim 61, but claim 61 was canceled in the December 5, 2002 Amendment that was entered) under 35 USC

103(a) as being unpatentable over *Davis* (USP 5,796,952), in view of *Tuzhilin* (USP 6,236,978) and further in view of *Alexander* (USP 6,177,931). It is submitted that claims 42, 44-46, 48-60 and 62-73 are patentable over the cited references for at least the following reasons.

Independent claim 42 is directed to a method for monitoring a subscribers interactions with advertisements in order to generate a subscriber profile. The method includes monitoring subscriber interactions to advertisements presented. The subscriber interactions are processed in order to generate the subscriber profile. The subscriber profile identifies demographic characteristics about the subscriber. The processing includes applying heuristic rules that associate the subscriber interactions to demographic characteristics about the subscriber.

As defined in the application, the heuristic rules may be logical rules or may be rules expressed in terms of conditional probabilities. Fig 10A and the associated text from page 19, line 30 – page 20, line 18 illustrate and describe exemplary logical heuristic rules. For example, the heuristic rules equate an individual watching the soap opera “Days of our lives” with a housewife (1050). The heuristic rules also equate higher frequency of channel changes to higher income, as illustrated a user who zaps once every 2 minutes and 42 seconds is associated with an income of greater than \$75,000 (1010). Fig. 10B and the associated text at page 20, lines 19 – 27 illustrate and describe exemplary probabilistic heuristic rules. The exemplary heuristic rules define probabilities of demographic make-up of a user based on the category of programming they are viewing. For example, the heuristic rules assign an individual watching the news a 40% probability of being over the age of 70, a 40% probability of making between \$50K - \$100K, a 50% of being a single member family, and a 70% chance of being female. It is clear that the exemplary heuristic rules described in the application are related to viewing characteristics (i.e., watching soap opera, watching the news) and predict traits that are not related thereto (i.e., housewife, 40% probability of income between \$50K - \$100K).

It is submitted that none of the cited prior art disclose or suggests the method of claim 42. For example, none of the cited references disclose or suggest applying heuristic rules that associate the subscriber interactions to demographic characteristics to the subscriber interactions

in order to generate a subscriber profile that identifies demographic characteristics about the subscriber.

In fact, the Examiner **acknowledges** on page 5 of the Office Action that *Davis et al.* do not disclose identifying traits about the user not directly related to subscriber interactions (demographic characteristics) or the use of heuristic rules to associate the subscriber interactions and non-interactions (demographic characteristics). The Examiner asserts *Tuzhilin* utilizes “heuristic rules to create a dynamic consumer profile, which tracks user interactions and traits ... the rules are retrieved and generated in order to determine the dynamic profile, for example ... (IF Sex=“Male” and Shopping_time=“evening” and Day_of_week=“weekday” and Purchase=“Diapers” THEN Purchase=“beer) ... (Figures 4 and 6, column 3, line 58-column 4, line 29, column 5, line 47-column 6, line 44, column 8, line 20-47, column 11, lines 42-66)”.

The Applicant submits that the Examiners assertion that *Tuzhilin* utilizes heuristic rules to associate subscriber interactions to non-interaction traits (demographic characteristics) is clearly erroneous. To the contrary, *Tuzhilin* discloses a system that creates a profile of a user that includes a static portion (i.e., name, address) and a dynamic portion in the form of rules associated with transactions made by the user (i.e., if user buys diapers while shopping on a weekday night, the user will likely also buy beer). As it is likely that there will be numerous rules created based on the users interactions, the rules are aggregated together. The user can then select the aggregated rules that best fit. The profile can be used to help a user shop in the future. The profile generated in *Tuzhilin* is basically rules generated in relation to the transactions made by the subscriber. There is clearly no disclosure of a *subscriber profile generated from subscriber interactions to advertisements presented that identifies demographic characteristics about the subscriber, let alone the subscriber profile being generated by applying heuristic rules that associate the subscriber interactions to demographic characteristics to the subscriber interactions*, as required by claim 42.

Accordingly, even assuming arguendo that the Examiners motivation to combine *Davis et al.* and *Tuzhilin* is sufficient (without conceding or acknowledging that such motivation is sufficient), the combination of the two would not result in a method as recited in claim 42.

The Applicant submits that *Alexander et al.* do not disclose the features of claim 42 that are delinquent from the teachings of *Davis et al.* and *Tuzhilin* (whether taken alone or in combination with one another). On page 6 of the Office Action, The Examiner asserts that *Alexander et al.* “discloses a viewer profiling system which monitors a users viewing habits and internet browsing, and is able to determine a users marital status, number of children and age (column. 28, lines 13-67, column 30, line 1-44)”. Even assuming *aguardo* that the Examiners interpretation of *Alexander et al.* is correct (conceding or acknowledging such), the Examiner does not assert that *Alexander et al.* disclose the use of heuristic rules that is delinquent from the teachings of *Davis et al.* and *Tuzhilin* (whether taken alone or in combination with one another). Moreover, the Applicant submits that *Alexander et al.* do not disclose heuristic rules as recited in claim 42.

To the contrary, *Alexander et al.* simply disclose varying levels of analysis (e.g., “the Profile Program ‘learns’ to *recognize* a finer breakdown about the various types of data collected and then uses the learned information to describe a ‘Viewer Preference’” (col. 29, lines 56-67); “Profile Program performs multiple levels of sophisticated *analysis* and *learning* involving numerous *comparisons* of the basic viewer profile data and the simple statistics collected about a particular viewer to develop Viewer Characteristics” (col. 30, lines 1-16); and “the types of interactions in both sets of circumstances are *analyzed* ... the Profile Program determines Viewer Characteristics ... Over time with sufficient data the EPG *characterizes* ... a broad range of various other Viewer Characteristics” (col. 30, lines 17-37). Clearly there is no disclosure of using heuristic rules in the analysis.

The use of heuristic rules is also not inherent in *Alexander et al.* That is, while it is possible that *Alexander et al.* retrieves heuristic rules that associate subscriber interactions to advertisements with demographic characteristics about a subscriber and applies these rules to subscriber interactions to generate a subscriber profile (“Viewer Preferences” or “Viewer Characteristics”), that is *but one possibility* and is clearly *not necessarily present*. For example, the data may be entered (e.g., “The EPG requests that the viewer provide certain profile information ... the viewer’s top favorite channels; the viewer’s favorite types of channels, and the times which the viewer is most likely to watch television” (col. 28, lines 12-21); “the EPG is

capable of distinguishing between individual viewers ... each viewer has an individual PIN or other identification number ... each viewer uses an individualized remote” (col. 28, lines 23-29)).

Accordingly, even assuming *arguendo* that the Examiners motivation to combine *Alexander et al.* with *Davis et al.* and *Tuzhilin* (alone or in combination with one another) is sufficient (without conceding or acknowledging that such motivation is sufficient), the combination of the three would not result in a method as recited in claim 42.

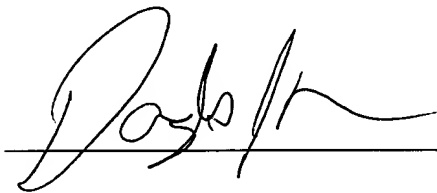
For at least the above noted reasons claim 42 is submitted to be patentable over the cited references. Claims 44-45 depend from claim 42 and are therefore submitted to be patentable over the cited references for at least the same reasons and for the further features recited therein. Accordingly, the rejection of claims 42, 44 and 45 should be withdrawn.

It is submitted that independent claims 46 (and dependent claims 48-51), 52 (and dependent claims 53-59), 60 (and dependent claims 62-65), 66 (and dependent claims 67-70), 71 (and dependent claim 72), and 73 are patentable over the cited references for reasons at least similar to those addressed above with respect to claim 42 and for the further features recited therein. Accordingly, the rejection of claims 46, 48-60, and 62-73 should be withdrawn.

Conclusion

For the foregoing reasons, Applicant respectfully submits that claims 42, 44-46, 48-60 and 62-71 are in condition for allowance. Accordingly, early allowance of claims 42, 44-46, 48-60 and 62-71 is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'D. J. Ryder', is written over a horizontal line.

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